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| **Mathematics 5E Lesson Plan** | | | | |
| **Grade Level 3rd** | | **Concept Addition and Subtraction** | **Teacher** | **Date(s)** |
| **Outcomes** | | | | |
| **Content**  *Common Core Standards &Essential Standards* | 3.NBT.2 Fluently add and subtract within 1,000 using a variety of strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. | | | |
| **Big Idea**  *What is the key learning? Why are you doing this?* | 2 digit by 2 digit Addition using place value | | | |
| **Essential Question(s)**  *What question(s) should students be able to answer at the end of the lesson/unit?* | How does place value help me add? | | | |
| **Knowledge**  *What do students need to know to be successful (e.g., formulas, vocabulary, etc.)?* | Addend, sum, place value, digit, ones, tens | | | |
| **I Can Statements**  *What should students be able to do independently?* | I can use a variety of strategies to add 2 digit numbers. | | | |
| **Evidence of Learning** | | | | |
| **Assessment**  *A good activity should reflect mastery of the standards and be completed independently.* | Exit Slip – students will add 35 + 15 and write about the strategy they used to solve this problem. | | | |
| **Resources** | | | | |
| **Technology & Resources**  *List the technology and resources being used in the lesson (e.g., text, web sites, video, etc.)* |  | | | |
| **Materials**  *List all materials being used in the lesson* |  | | | |
| **Instructional Plan** | | | | |
| **Number Talk**  *During a number talk, the teacher presents an equation for students to solve mentally or a quick image for students to determine the*  *number of objects. Students compute mentally using a variety of strategies in a short amount of time (to promote fluency). The teacher facilitates discussion by having various students share strategies (teacher may record strategies or students may present/record their own strategies) and asks clarifying question. The teacher facilitates discussion regarding efficiency of strategies presented.*  **Or**  **Math Task**  *A task is a word problem strategically posed to challenge students’ thinking about a concept or skill. Tasks should be used to expose students to unfamiliar, yet appropriate concepts before formal instruction in a meaningful context. Tasks should also be used to revisit concepts during and after formal instruction in order to deepen students’ understanding of that particular concept. Students work independently or in small groups, using paper and pencil to solve, sharing strategies in a discussion facilitated by the teacher.* | *5 + \_\_\_\_\_\_\_ = 20* | | | |
| **Engage (Whole Group)**   * *Rigorous problem/task that requires reasoning with focus concept(s) for the day* * *Pose a question or conjecture* * *Provide a meaningful context/connection* * *Direct instruction* | What is adding? What do you do when you add? When do you use addition in real world situations? | | | |
| **Explore** **(guided)**   * *Students work through a set of problems or a task focused on skill or concept of the lesson* * *Teacher facilitates small group discussion, holds individual student conferences, asks probing questions to deepen understanding, identifies student strategies that should be shared with the whole group, and makes decisions about next steps for instruction* | Have students solve 13+13, 61+14, 49+19 using their choice of manipulative. They may choose from hundreds board, base ten blocks, pencil/paper, mental math. | | | |
| **Explain** **(whole group)**   * *Teacher facilitates whole class discussion based on guided practice work* * *Students are exposed to various strategies including student-invented algorithms and teacher-introduced strategies (when appropriate)* | Students will share the strategies they used to solve the addition problems.  How did you solve 13+13? What strategy did you use?  How did you solve 61+14? What strategy did you use?  How did you solve 49+19? What strategy did you use?  \*Students will show understanding that addition is putting addends together to find the sum which will always be a larger number than you began with.  \*Remind students if you add numbers in the ones place and the digit is larger than 9 you must regroup and adds to the tens amount.  Write the problem 27+16 on the board. Ask students what strategy they would use to solve that problem. Discuss that because 7+6 = 13 you must take that extra ten and add it to the 20 + 10 + 10. | | | |
| **Elaborate** **(independent/small group/whole group)**   * *May be class work or homework* * *Assignment should be revisited to provide student feedback on accuracy of solutions during the class period if class work or the following day if homework* * *Students work independently or in small groups on differentiated sets of problems or tasks to further explore the concept* * *Teacher works with individual students or small groups on intervention strategies or enrichment/extension tasks* | Have students solve the following 5 problems: 52 + 17, 24 + 16, 73 + 43, 22 + 13, 69 + 12 as an independent activity. Students must choose one problem and explain in complete sentences their strategy for solving the problem. | | | |
| **Evaluate (assessment)**   * *Minute-by-minute assessment throughout the lesson* * *Exit tickets* * *Conferring with students* * *Analysis of students’ notebook* * *Common formative assessments (PLC created)* * *Quizzes* * *Tasks (PLC created, evaluated with a rubric)* * *Student interviews* | Exit Slip – students will add 35 + 15 and write about the strategy they used to solve this problem. | | | |

5E descriptors from Durham Public Schools Elementary Mathematics Blueprint

**Engagement**